CBS NEWS - APOLLO 14 1ST MOONWALK (2-5-1971)

https://www.youtube.com/watch?v=8YveLxEImpA (https://www.youtube.com/watch?v=8YveLxEImpA)

Uploaded by DANNOTCH'S NEWSVIDEOS (https://www.youtube.com/channel/UC7X0LKts7k4FT498Id_x5sg) on Mon May 24 2021.

From Friday, February 5th, 1971 CBS NEWS Coverage of the first E.V.A of Apollo 14 with Alan Shepard and Edger Mitchell. Shepard became the 5th human to walk on the Moon at 9:42:13 A.M E.T.

- Coverage runs from 9:37 A.M E.T - 2:26 P.M E.T.
- Most of this is the complete coverage with commercials included.
- Apollo 11 astronaut Buzz Aldrin is part of this coverage along with Veteran Astronaut Wally Schirra.

  Apollo 14 Crew:
  Commander: Alan Shepard
  CM Pilot: Stuart Rousa
  LM Pilot: Edger Mitchell

00:00:00 (https://www.youtube.com/watch?v=8YveLxEImpA)

okay let's get by when they come out [Applause] okay let me get over here on the other side so the jettison bag has materials the crew will not use on lunar exploration damn hung up on something else probably that uh that's the door handle now okay very good standing right for the lec okay

00:02:22 (https://www.youtube.com/watch?v=8YveLxEImpA&t=142s)

the rope looking thing that they tossed out is the lec the lunar equipment carrier uh that they stretch that out kind of like a clothesline and voice things back and forth on it heavier equipment twice the down of the lunar surface and back up to the ascent stage to bring back home with them the rock samples and the that equipment they do bring home not very much of it we'll be throwing the equipment conveyor belts i think it's made all the more stark by the fact that the sky is completely black roger that's one of the reasons is anybody deploy the mesa and the mesa has released asa is released properly houston roger out cutting down the ladder that carries the equipment the scientific uh packages

00:04:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=240s)

equipment the scientific uh packages that they will put out on the moon it also contains has been deployed color camera which they will be turning on shortly now we hope we'll get some early pictures okay al beautiful we can see you coming down the ladder right now it looks like you're about on the bottom step and on the surface apparently houston's seen pictures are not feeding to us yet okay you're right here they are on the surface it's been a long way but we're here it's been a long way for our shepherd and i can see the reason we have a tilt is because we've landed on the slope the landing gear straps appear to be about evenly depressed right you're out and moving around getting familiar getting familiar with the surface surface is extremely soft matter of fact it's in a small depression the uh the service or software comes up all the way to the top of the footpad and even fold it over the side to some degree the same the shoe of the plus wise truck roger okay we'll move on over take a look at tomorrow if i take a look at concrete i should say which is right where it should be and it's a very impressive site

00:06:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=362s)

it's a very impressive site and terry this is houston you are go for two man eva over [Applause] roger thank you and continuing we can see the balls on the rim it looks as though we have a good traverse route up to the top of cars i can see cone ridge going along to the north that's very apparent the cam was in a fixed position and will remain so throughout uh the two uh walks and the moon but they're moving over to as much of the area as it can cover area in which they are working right now they have not come to this first movement of the camera yet and as a consequence you've not seen our shepard in this in these pictures that uh now show just the landing ladder from the lunar module hatch now it looks like he's doing something to the camera met blanket the net is the mobile equipment transporter i think that's more fun to see rickshaw there isn't it yeah okay mitchell coming out now great picture though that's a shepherd there

00:08:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=483s)

like he's working right on the camera not in the back we ought to see mitchell coming down the ladder i think that tilt is coming from this hinged door that uh this modulized equipment compartment's on and you see that as well tries to move the metal rickshaw whichever in other words as he works up slightly now to uh get the net uh which is a pull card out from under it and john mclisa is saying he's uh working on that we can see you coming down the ladder now it's very great coming down here bottom step bouncing along that one sixth gravity this is part of their testing now this isn't just for fun and games justin got used to this one-sixth gravity there at the foot of the ladder that's great

00:10:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=602s)

he's releasing it though okay that is finally clearly oh i'm going to come over how about getting my antenna out before i leave here okay if i go around the corner or something just drop this baby over here the mat will be placed on one of the foot pads the not against a mobile transporter that will two-wheel the heart many people don't realize is how many how many hours they spend rehearsing this maneuver too as well as flying the spacecraft each of these techniques is practiced over and over as they unload uh some of these bits of equipment for instance this mobile transporter they put it over on one of the footpads it makes kind of a handy little uh mobility of uh for them to work with very great shepard now adjusting the television a short time ago uh it doesn't

00:12:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=723s)

a short time ago uh it doesn't appear there's going to be any trouble getting the mat up until greater backup crew here in mission control okay and here comes the lens cap blanket is coming off all right in these so-called tourist broadcasts broken the code the foil coding that narrows the mesa i hope somebody thought about that bright reflection here oil coating maybe gonna bounce off that bright sun and uh knock off that lens again they've made a compensation on the lens this time as well so we shouldn't have the same potential risk great

00:14:20 (https://www.youtube.com/watch?v=8YveLxEImpA&t=860s)

this is our simulation of what's going on about now in a moment we'll have the live pictures again just as soon as that would have been one person cdr is eight one percent three point seven five no flags then cooling right you're out they're reading out billion good down here quantities of uh coolant setting the tv up on a tripod oxygen left in their portable life support system that should last over four hours hello cbs news color coverage of shepard mitchell's first lunar excursion will continue in a moment tang brings you the morning as few men have seen it the sight of our own planet coming up over a strange horizon in space earth rise now two more men will see it and with them tang the orange flavored instant breakfast drink with more vitamin c than orange juice nutritious tank for space men and earth families cbs news color coverage of the flight of apollo 14 will continue in a moment this is cbs drock came from the moon and u.s steel is studying it to expand men's knowledge we're

00:16:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=961s)

it to expand men's knowledge we're involved we're using our million volt electron microscope largest in the western hemisphere to probe moon rock just as we used it to probe steel tooth enamel and much more because man can improve his life by expanding his knowledge at united states steel we're involved wtop television nine this is a cbs news special report ten years later the flight of apollo 14 sponsored by western electric the people who make communications equipment for the bell system and tang the nutritious breakfast drink for breakfast tomorrow here again is walter cronkite wrong in houston in mission control they were just asking if the lens cap was still on the tv camera view of the mesa and ladder area on antares the voice you hear from mission control is that of the voice of apollo uh john mcleish okay it's about 50 feet i'd say why don't we get all the cable out while we're at it we're gonna have a television picture again just a moment you can see on that screen the elevation will be positioned about 50 feet out in the upper left-hand corner of your picture there of mission control that's a display screen with which mission control watches the television pictures and you can see there that there is some color showing on the screen apparently there adjusting the camera now the television camera on the moon of course is not for the

00:18:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1080s)

course is not for the edification and amusement places oh what a picture aiming for the general area of uh okay i think you can zoom in a little more let's try 40 here okay i'm on the f-stop now we'd like to stop it down one additional stop that's towards the higher numbers that's our shuffle adjusting the television 44 and i was going into 40 standby mitchell was the uh out there and by the lunar module [Applause] okay hold the zoom there and the uh position looks good also which is tremendously valuable to the scientists and the engineers on the ground see if you can stop it down a little more run it up uh when the diaphragm ring up against the stop there it's still a little bright hard to adjust the camera with that very bright uh sun no atmosphere there around the moon to interfere with the sun's rays it gets up to 240 degrees on the moon at the sun

00:20:04 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1204s)

also houston request you go to peak control okay all right factory okay al now we'd like to open it up to f22 if you've ever had your wife sitting across again while you adjust the color television set imagine what alex shep is going through with mission control 238 000 miles away telling him what to set up of course this is where i like to vindicate myself from way back but i was anticipating the day that i'd watched television on the moon i was accused of not wanting television in space i remember he said bitterly the other thing is i didn't know i was supposed to turn around that day i can recall very vividly in a meeting though now about 88 years ago would you confirm that you're at f 22 now anticipating the day that i'd be sitting watching contemporary well uh while shepard's doing this what uh mitchell's been doing the background is gathering contingency samples that is he's going ahead and picking up rock samples from right

00:22:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1321s)

picking up rock samples from right around the lunar module and soil samples while we're waiting for the television adjustments the 230 position approximately 50 feet where the camera is is slightly uphill we see that the lamb did in fact land on the sort of a down slope this is here almost a basin [Applause] of 2.84 [Applause] black and white film with an asa 160 with 400 use an f-stop of four to eight with a speed of one fifteenth of a second and as we mentioned there are before few samples that uh can i size at all mostly uh and sample size and the rocks of uh generally on the two inches or less all right as you can see the center speed table was deployed you did leave the contingency sample on

00:24:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1440s)

you did leave the contingency sample on the ladder yes for both crew members were just off the ladder shepard 120 mitchell 124 both reading now in the 70 to 85 range your head mitchell deploying the solar wind experiment now i almost look as if you're skipping for joy and i suspect they are okay maybe you can explain it to us a little more what that solar wind experiment is that they pick up on this aluminum foil and then streams of particles always streaming out from the sun and they're trying to pick up these particles as bits of the south side it's a wind it'll push you uh that is you if you set a big sail in space it it will push

[00:26:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1560s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=1560s)

will push you will yes very slowly but yeah very shortly i recall uh being in a long discussion with dr von braun about the fact that maybe named austria could have a career in way way out space and sail with a solo wind panel but the size of four or five football fields and eventually the acceleration or the slight change in velocity would uh cause you to move about a colleague of mine 114 for micro balance that uses light pressure pushes on his light we're setting up a 10 foot now positioned by ed to improve the reception a little bit although it's quite good at the time and it also serves as the continuing antenna then for the scientific station that they will set up on the moon which will last for well over a year the nuclear powered we'll see them set up the nuclear power station very shortly one of the interesting things i'm noticing here we first have a we have a very good picture from the moon is the dust flying about and the way the men are hopping and i recall some of the uninformed at least uh people who are skeptics thinking these were all pictures taken on earth from people on the moon it's very difficult to move that way and it's also impossible to make that way very soon now they'll be switching transmissions over to that uh erectible ending up the laser reflector and which permits uh with laser beams exact measurements of the distance from

[00:28:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1680s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=1680s)

exact measurements of the distance from the moon and the wobble of the moon and the earth cbs news color coverage today's walk on the moon will continue in them up we're getting live color pictures from the moon on your first time more at uh forest penetration and uh did you meet any rocks or anything like that this is capsule communicators ed mitchell had said he expected to talk all the way on the ship he has uh positioned the antenna legs into the lunar surface but we're not hearing exactly a running line of powder from him he was good when i thought i'm describing the moon from the land now you're too far away i should have more cable than that okay now we were respecting the cable that played you're too far away well i wanted to get maximum length stop moving on in let's see yeah this is all okay though okay opening up

[00:30:11 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1811s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=1811s)

seven five three and a quarter two and three quarters pounds of uh pure oxygen which inflates the suit to preserve an environment that they can breathe in and that was one of my specialists in the old days was developing those but there's the antenna deploying [Applause] up the top you're safe down to about two and a half pounds and you start getting more trouble breathing [Applause] okay in the back room working overtime the antenna pops out like an upside down umbrella what i was referring to the freebies is that they probably had to do this once before simulating it to help deploy that antenna tilt it over for the next flight and looking at that antenna you must realize that we are up from them

[00:32:26 (https://www.youtube.com/watch?v=8YveLxEImpA&t=1946s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=1946s)

aiming that thing back at us at earth they've had trouble with this thing now it's taking an eyeball alignment towards earth and then it was all okay i have the earth centered okay okay houston uh dark side and all this is here

[00:34:04 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2044s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=2044s)

okay and uh we'd like to get an emu status report as you go by okay the cdr3 [Applause] okay this is [Applause] very comfortable too figures you'll see from time to time on the screen of the length of time of the walk are timed from the depressurization your there's an extra 10 minutes figured in there shepard stepped down when the moon surfaced at 9 54 a.m eastern time and that's 33 minutes from 33 minutes ago mark 45 minutes since cabin depressed did any appreciable stuff flying off i'd like not mitchell uh he's going back into the cabin now to turn on the s-band

00:36:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2162s)

turn on the s-band radio the transmitter that has just been erected a transmitter that feeds through this antenna that has been erected and he will also then transfer further equipment from the lunar module out to shepard uh give me a call and if i don't hear you in about 30 seconds they'll go and this is houston here go to switch to lunar state go ahead being the code words for this transmitter how are you reading us loud and clear beautiful actually whereas a moment ago it would appear that they were running behind schedules aligned much faster than they've been anticipated and they're now back on schedule shepard now transferring the contingency sample up the conveyor belt the first lunar material to go to the limb i almost picked up ten minutes in fact from uh get in there with him but never dare for us to leave

00:38:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2283s)

okay well uh this is there seems to be a general swale or a wise valley between the triplet craters and the doppler craters and we are we are on the downhill side just to get approximately 15 feet lower there that starts back up to the rim of dublin but it's a very uneven landing area here and uh of course like all other sections of the moon it's a pop marked by uh mass amount of craters uh surface here as we pointed out is mostly fines and i hate to discuss any kind of videos here and i made it because of the whim because i can see some very different indications of the radial dust pattern caused right here in the area uh one o'clock position for the lamb but uh perhaps they're just

00:40:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2402s)

but uh perhaps they're just from colin although they don't seem to have any particular rape they probably are ejected from uh from tablet since they appear to be closer to the top of the 92 drill bit they are a lighter gray in material of skimming the material is lighter gray in color right now looking back at it because we're looking at the sun at a low center angle and uh it's just not the right direction to view that crater we're looking for a photography but there's certainly our bulb is on it from here it looks as though they're at least uh twice in diameter perhaps at least the ones we can see here in the western slope they appear to be grouped fairly close to the rear weather crater and not too many large builders aren't down the sides of the slopes the outside ramp again look at those [Applause] approximately one foot contest

00:42:28 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2548s)

okay just another minute and so the ifa came back from its traps being a great major headache mitchell has been loading up the bag before you start transferring on a verified contents and atv cameras and other equipment etv equipment transfer bag and you lower it down to a television camera cbs news color coverage a man's fourth walk on the moon will continue in a moment tang presents tomorrow imagine living actually living for 56 days in outer space eating and sleeping and working in orbit around the earth someday three astronauts will go ahead with the coordinates right here aboard sky lab the first manned space station during this incredible mission they will find out what types of work man can perform during extended flights they will learn how the human body reacts to weightlessness over long periods of time three and on board this space shot of the future they will have tang the orange flavored

00:44:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=2641s)

they will have tang the orange flavored instant breakfast drink with more vitamin c than orange juice the same thing that's on your kitchen table nutritious tank for breakfast tomorrow we're listening to the choice of the astronauts from the moon 238 000 miles out there and a live color picture three feet to the south east of the current location of the bell that's probably where the bus was when the engine was cut off and the lamps slowly drifted to the northwest layer and i would estimate that the hill back to the to the south is abrupt uh 100 feet higher than we are roger okay i'm ready to bring this down okay okay better come get me all right

[00:46:05 (https://www.youtube.com/watch?v=8YveLxElmpA&t=2765s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=2765s)

okay okay just a second here let's get a little more attention coming out with the fill okay clear the steps and i'll take it down slowly you have it thank you hold it right there for a minute the simplest way of doing things and that apparently is the efficient way the equipment bag down now is advertised we're at 56 minutes since cabin represent the bag being attached to the mesa now i gather this camera is a little bit north and west of the lunar module north and east of the lunar module is looking near southwest the the culprit in other words would be in back of the camera as you're looking at the scenes as a matter of fact uh you can see how

[00:48:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=2880s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=2880s)

as a matter of fact uh you can see how much difficulty there is getting that camera focused correctly it's not now and perhaps can't be focused any better than that in that tremendously bright sun on the moon they're gonna have to turn the camera around and face it up right in toward the sun for the second lunar walk tomorrow and there's a great deal of doubt they'll be able to do that and get much of a picture for us tomorrow for that walk we're hoping for the best but we don't know and even uh at best they'll probably get out of range of the camera very shortly since they're walking almost a mile uh from the lunar module this brightness brightness causes this fuzzy effect we see it's not uh fall for anybody's television set i'm sure we have a very good one here i'll be going out to plant the flag very shortly now i don't know whether you caught the time when i said all right bruce would you pull this up and boost roger 12. ed mitchell coming back down the ladder there's a great line on this thing of course al and i are the original seven and at michelin's two rooster consider themselves to the original 19.

[00:50:02 (https://www.youtube.com/watch?v=8YveLxElmpA&t=3002s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=3002s)

original 19 are getting their licks in today they were in the astronaut class of 66. uh some years after you guys have made your first flights look at that bounce of the head that's something i'm gonna hit the bottom step step yep oh okay okay and then down okay wait for a minute okay shepherd and mitchell will deploy the american flag he's going to be with us for the next half hour so general olga of course was the second man that set

[00:52:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=3121s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=3121s)

of course was the second man that set foot on the moon right after neil armstrong on the flight of apollo 11. and buzz i'm i'm wondering uh i remember how thrilled we were when you placed the flag on the moon the first american flag what are your thoughts now well in a way i'd like to be up there with him with the opportunity to put that flag up that really uh as i look back on it has to be one of the most proudest moments that i ever had in my life is there is there an urge to go again was well i think any of us in the astronaut group would uh do just about anything for another opportunity but we have to be realistic and think in terms of the opportunities that are available for us to participate in the space program in other ways and the number of people that have put in so much work and deserve their opportunity to go it's a great thrill being able to watch this site up there in color isn't it the picture that i'm looking at is extremely good i'm quite quite pleased that we're able to get this back thank you buzz we'll be uh we'll be getting in touch with you from time to time down there as this walk goes on thanks so much for being with us very welcome okay uh

[00:54:03 (https://www.youtube.com/watch?v=8YveLxElmpA&t=3243s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=3243s)

20 feet there you go yeah beautiful baby okay okay camera doing here the word beautiful becomes a big part of our vocabulary as you may notice the flag being positioned about 20 feet from antares [Music] how quickly they get used to the moon environment uh they're moving much better now than they were just 15 20

minutes ago beginning to really move out bouncing across the lunar surface you're going off camera that's it mitchell nurse interview good of course mckenna's becoming a pretty good stage director there isn't it okay take a picture this way you know swinging around so they can see the television all right okay we can see it uh and they've got pictures of each other standing next to the flag for the scrap

[00:56:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3360s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3360s)

deck there we go i think i'm still too close to you except for that leg big things are now tripping over that cable [Applause] indianapolis indiana try it taking each other's picture by the flag hey to the tv camera right that is 180 out from that it'd be better [Music] okay there you go

[00:58:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3486s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3486s)

okay stop you have about three minutes remaining on that uh magazine claremont california but we won't change it okay i'm gonna mitchell is on his way over to get the television camera he's going to hand hold it and pan it around for a view of the moon as much as can be seen with this sun angle okay i'll point a little bit more to the south [Applause] mitchell will take a tv panorama of the area five on this

[01:00:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3602s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3602s)

mitchell is on his way over to get the television camera he's going to hand hold it and pan it around uh for a view of the moon uh as much as can be seen with this sun angle [Applause] mitchell will uh take a tv panorama of the area five on this foreign and how's your picture oh yeah uh go ahead [Music] okay how's your picture now roger it looks good we can pick up this can you see the horizon that's affirmative the horizon is about two-thirds of the way up from the bottom of the tube the flag is over near the left-hand corner of the field of view and that little rise uh is sort of centered with the small [Music] um [Music]

[01:02:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3722s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3722s)

i noticed that they picked up the same uh shuffle that uh that we did after a while i think that uh probably indicates that they've uh had a good long period of training i'm sure they'd agree with that but does it improve much based on what uh well i think one gains confidence as other people accumulate experience and you're able to talk to him about the various aspects of it and make improvements in the training [Music] problems with some equipment uh it's it's actually not a very strenuous endeavor but you now of course that's when you're talking about two hours two and a half hours uh i think we're gonna see perhaps some uh endurance effects coming in because they've got two different evas and they could go up to four and a half or five hours on each one of them uh you said the cables out there were something a problem in keeping your feet yes because the uh the visibility in the helmet is not the same as you'd have just walking around on the surface of the earth and it's a little difficult to tell especially when you're moving sideways or backwards to be able and see exactly where your feet are going and that cable uh does not lie perfectly flat and it's quite easy uh kneel at one time that was uh put a little bit tangled up in it okay we're doing pretty well so [Music] it okay

[01:04:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3840s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3840s)

now another sector to the right all right we got your shadow okay it's a very low spot the deepest uh part i guess is what we were calling uh relief before [Applause] because it is so different than what i expected where you're looking at now this deep part is to the south of dublin and it's probably you don't need to stop talking when i talk if you're going to do both okay i'm bringing it back here [Music] northwest and you should be able to see in the distance and i've lost it now because of the sun angle but it's just about on the near horizon outside there are three mounts [Applause]

[01:06:11 (https://www.youtube.com/watch?v=8YveLxEImpA&t=3971s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=3971s)

[Music] there i'm still uh working at eight o'clock and i just wonder how come the campus has the audacity to presume that we're wrong about doubletrainer okay bruce i'm coming around one more sector and uh you should be i'm gonna move it just a little bit before you should be able to see the large rock uh the four or five rocks i was talking about in my discussion before we got out of the layup and now i'll zoom in on those by may yes wait here we go cbs news color coverage today's walk on the moon will continue in a moment when astronauts talk to earth from the moon their voices travel across the void 230 000 miles and along with their words come billions of bits of vital data from the speed of their heartbeats to the speed of their spacecraft but after these communications reach earth they take another journey over the bell telephone network by wire cable switching centers and microwave relay towers like this the bell network speeds the information across a vast communication chain to nasa's ground control centers this network with equipment made and installed by western electric is the same network that brings you reliable telephone service western electric we make bell telephones

[01:08:02 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4082s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=4082s)

western electric we make bell telephones we also help make the network that carries the longest long distance calls in history cbs news color coverage of the flight of apollo 14 will continue after this message cbs news color coverage of the flight of apollo 14 will continue after this message tang presents the moon more than a quarter of a million miles away and yet earth's nearest neighbor in space man has fed his imagination on it since the beginnings now he has set foot here leaving his tracks in the luna quiet and with him tang the orange flavored instant breakfast drink with more vitamin c than orange juice nutritious tang for space men and earth families and ed mitchell on the surface of the moon continues to fan the color television camera around for a look at the surroundings in which the lunar module and terry's landed this morning about an hour into their walk the moon we've got another three hours to go let's listen him zoom in out here once more but you see close hand out there [Applause] you're pointing at the sky okay that's better on this thing sure [Applause]

[01:10:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4200s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=4200s)

[Applause] beautiful [Applause] finished with the documentation uh counter one one zero roger I one one zero indianapolis indiana and ed a frame or two ago it looked like one of those rocks was split right down the middle uh did you notice that too [Applause] that indianapolis indiana reference here every once in a while there's a code reference to one of the magazines of the camera that is marked i indianapolis it looks like it's from there we'll go back on with the tv panorama we're about uh two minutes behind timeline at this point is [Applause] and you're looking at sky again bring her down okay okay ed we're recording all this on videotape so that it only takes a relatively brief uh period of time looking at the the scene that we can play it back frame at a time later on back to 25. we have lost the color television for a moment from the moon this was a planned uh recess and the coverage on the of the moon by the color television camera while they rewind the color converter or something like that maybe somebody can explain it to me and better a better phrase later but that's the way it's passed on to me now

[01:12:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4320s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=4320s)

it's passed on to me now and in one minute or so we'll have the color television back again very shortly thereafter uh ed mitchell will be taking the camera back up to the mesa uh to this tray you saw deployed from the lunar module descent stage a moment ago and it will be reaffixed there and aimed at the area where they'll be setting up the scientific experiments and the nuclear power central station that will transmit the results of those experiments back to earth over a period of a year or more or probably much more they're running just a little bit behind their timeline but not far two or three minutes uh from the very planned set for all of these activities in the first planning of this mission 17 months ago it's really remarkable how close they hold to these schedules with all that must be fed into them and all that must take place it's going very well the flag has been deployed we saw a great picture of that we had a good look around the moon and now very shortly we'll see them setting up the uh scientific experiments al shepard and ed mitchell men on the moon the fifth and the sixth al shepherd at 47 years old the oldest astronaut in the astronaut core of our first man in space finally getting his long-held wish to make it to the moon and for a long period of over six years he didn't think he'd ever fly again with that ear disorder he had but in 1968 he underwent an operation cleared it up he kept himself in superb physical shape throughout he went on a very high intensity training program and qualified for this flight to the moon that's it we switched now from cbs to nbc news for the next five minutes

01:14:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4441s)

five minutes nbc news continues with its color coverage of apollo 14 brought to you by the gulf oil corporation producers of more and better energy from oil here again is john chancellor the astronauts still on the moon have just received a message of congratulations which was telephoned to their houston headquarters by the president of the united states the president sent his congratulations he said like millions today he too was an astronaut watcher the picture he said was coming in well at the white house he praised the millions of people he said who worked on the spates program he wished the astronauts godspeed he invited them to dinner at the white house and to spend the weekend at camp david and uh jim did was there any more you were listening you you just got all over it that was it but sometimes the president himself has got on presidents in the past have gone on and talked directly to the astronauts these men are busy and mr nixon just sent his regards they are running now about they've been out there about a minute about an hour and 10 minutes or an hour and 15 minutes and they're running only faintly behind schedule the next thing when we do get our pictures back from the move you will see them unloading the scientific experiments package and the acronym for that is alsep apollo lunar scientific experiment package it's a 20 million dollar set of gadgets and scientific machinery designed to set up a more or less permanent scientific research station there at brownmorrow which will beam beam signals back to the earth hopefully for quite a long time we'll be watching them do that and this probably is a greater degree of scientific enterprise than in any other flight so far the apollo 12 and 13 well 13 didn't make it apollo 11 and 12

01:16:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4561s)

it apollo 11 and 12 were designed primarily to test out the systems the pilots the adequacy of landing there but now that they have more confidence they have quite a package of scientific experiments that they'll be carrying out within the next hour or so and they're just setting up for that now i'd like to put a a question to alan bean who was with us in houston uh about the scientific experiments am i right when i say that this is a bigger scientific program than all of you were able to undertake on apollo 12. that's absolutely right matter of fact we're the evolving uh concepts of that we now switch back to cbs news for the rest of the eva the matter pool card has been deployed now for him [Music] roger this is mitchell moving the uh moving the camera now over to the mesa for the pictures that will show them setting up the scientific experiment stations you tell me that there was some difficulty in getting the color picture that was the color camera uh that they were using but they were getting black and white pictures from it and quite good pictures too however no reason to believe that they're not going to be getting color pictures again

01:18:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=4680s)

going to be getting color pictures again once they get over to the mesa and restore the normal transmission televise the all-step offloading slayton uh has just relayed a message from the president to astronaut shepard dan mitchell and here is a recording of that message we're very pleased a few minutes ago to receive a phone call here in mission control from president nixon he asked me to extend to you and stu this best congratulations he said that like millions of people all over the world he is an astronaut watcher at this time the picture is coming in very well at the white house he said the president said he knew how many thousands of people had worked on this mission without whom men would not be walking safely on the moon he asked that i wish the apollo entire team well the president said he was proud of you and proud of them he sent you a wire just before the flight wishing you godspeed and he wishes you well on your return flight the president also asked me to invite you to the white house for dinner and to spend the weekend at camp david with your families after the mission is completed [Music] over didn't say anything about whether that invitation supposed to be rsv feed today can you poke one of the legs into the surface there it's a pretty flimsy tripod i realized getting color pictures again that reference was to the tv tripod okay what zoom are you on hey how's that we need to back off the zoom uh

01:20:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=4801s)

i think we'll have to [Music] cbs news color coverage a man's fourth walk on the moon will continue in a moment coverage of the flight of apollo 14 will continue in a moment this is cbs [Music] this is a cbs news special report 10 years later the flight of apollo 14 sponsored by tang the nutritious breakfast drink for breakfast tomorrow and western electric the people who make communications equipment for the bell system here again is walter cronkite ten years later be precise nine years and nine months since al shephard made the united states first flight into space a little tentative step just 115 miles up in the third 302 miles downrange from then cape canaveral that same allen shepard stands on the moon he's just readjusted the camera and now he and his partner the flight of interiors to the moon are unloading equipment packages with these first color pictures from the moon we're watching them as they go through their curtailed

01:22:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=4921s)

as they go through their curtailed highly sophisticated and refined chores on the moon they've been out now uh about an hour and 20 minutes this walk is scheduled for about four hours that swinging line of some kind there is interesting i hadn't thought about it before but i suppose with the lack of atmospheric resistance uh a pendulum that sort would swing almost indefinitely wouldn't it i mean where is there no affliction against the restrictions [Music] mitchell is just taking the hand tool carrier off you know and placing it on the [Music] sometimes [Music] it means that they don't have to carry all this heavy equipment with them although of course everything on the moon weighs just one-sixth what it does on earth but still that's very unhandy carrying a whole lot of tools and cameras and other geological samples soil dust and so forth

01:24:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=5042s)

so forth interesting now they have this little cart to carry it all off the interesting thing about this cart there are fenders over each of the wheels so that the lunar soil won't be flipped up as the wheels rotate and throw it all over the men or all over the equipment this was a later development as they started realizing what might happen with it as we've seen as they move around there that moon dust which clings to anybody that touches it apparently one of the surprising things they found i think on apollo 11 it also flies in the air as you kick it around it doesn't settle immediately obviously again in that atmospheres one-sixth show heart rates on shepard between seven eighty one eighty and ninety seven again we're at one hour 35 minutes oh one of the better comments about the so-called littering of the moon is that all of that garbage if we can graze it that way was paid for and made on earth so i don't think we're leaving anything valuable there than equipment that'll give us data for years to come as you say where the seismometer is thinking that apollo 12 was there in november of 69 and we got data from it on the s4b impact the uh as somebody said not one dollar has been spent on the moon every dollar has been spent here on earth most of it in the usa speaking of that s4 the impact it did it did impact as we know but perhaps

01:26:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=5163s)

it did impact as we know but perhaps haven't reported the third stage of the saturn booster as scheduled smashed into the moon with the force of 11 tons of dynamite seismic waves which were recorded by the old apollo 12 equipment similar that's being put out now to give an additional amount of equipment on the moon and then when apollo 15 puts one out we'll have a triangulated system to judge the motion of the moon moon quakes seismic events and the s4b did its job hit the moon at 5 690 miles an hour about 150 miles south southeast of the apollo 12 uh seismic station that's too bad we can't call in a meteorite on on call to do the job for us the one that uh did cone crater probably had the explosive power of about 3500 tons of tnt explore quite a bit of the lunar interior with that kind of a blast but not too close well i know some of the scientists wish that there'd be a little moonquake or uh or some other substantial moon quakes while the astronauts are up there they say that they wouldn't be dangerous at all to them unless they were on the edge of a crater in the start of a landfall of some kind the earth fall would be an earth fall what uh moonfall i watch your terminology here all the time

01:28:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=5281s)

it's very much like setting up camp somewhere that's watching this operation unloading the old essex getting the shepard set electric generator now one hour 38 minutes so it's a cabin depressed now this is a fascinating bit of equipment this is that thermonuclear generator which has a plutonium core that has an isotope that creates nuclear energy and that powers the sending station and the equipment that is left on the apollo moon conrad uh had to beat on the side of the container to get that fuel cell out stuck in there because one of the reasons that people may not suspect that these were parked so that would fall back on earth they wouldn't contaminate earth uh if there's an accident off the launch pad or prior to getting an orbit and that's why it's being assembled now so it was totally safe up until this point and has to be lifted out to the core saw lifted out of that and then placed into the generator so that it will work there was some concern in 13 came back as to what uh it was the first test of uh carrying one of these back in a uh crash situation of course it was in the carried back in the lunar module but uh about the lunar module never having never they never expected that would be

01:30:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=5400s)

never they never expected that would be brought back to earth and here it came back with the apollo 13. so there was some concern but when it burned up in the atmosphere if it did this was destroyed if not it plunged into the ocean at one of the deepest points of the pacific ocean and apparently has been no harm from it's a very low order of radioactivity anyway in this particular thermonuclear generator maybe we'll get some confidence having used it on the moon so we can use something like it on the earth with more frequency the fossil fuels aren't exactly doing the job we'd like to quite smoke about a little bit from here generation all right there you go we're waiting on that all the temperature indicators are still white hey the doors are closed hey

01:32:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=5521s)

i suppose we talked about the door's closed you're talking about on the all-set power plant and now shepard's moving out to move the camera again you see in the shadow there shadow's almost a clear picture as position of his hands in that shadow it's very difficult to keep your fingers straight seven minutes behind this point seven must find the timeline now he just capped the camera and obviously therefore we don't have a picture uh he will move the camera around so that it will now be facing uh the next area in which activity will take place then we will probably see mitchell about the time he gets the camera reset now pulling the net as it's called the mobile equipment transporter around to the side of the mesa that's that little uh table we saw flop out from the lunar module landing stage a little bit earlier and they'll load equipment from the mesa over onto the map the rickshaw device and then mitchell carrying the barbell like device that he's assembling at this moment as shepherd is readjusting the camera that's simply a long pole with equipment hanging at either end of it a handy way to carry things is the chinese coolies discovered several thousands of years ago and it's being used by these space men walking on the moon now they'll carry the laser reflector on out uh shepard will carry that out because mitchell carries the barbell as it calls with the

01:34:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=5640s)

it calls with the alcept experian experiments on it that's the experiments to be set up on the moon and they'll be pulling the met we should have that picture again for us very shortly recounting for any who tuned in late this morning al shepard and ed mitchell made a very successful landing on the moon at 4 17 a.m eastern time that was some seven hours ago they had a little difficulty in getting down where radar didn't work until the last 90 seconds when they would have had to abort but it came on in time with the 90 seconds to spare they had trouble with a computer on their last pass around the moon and the men here on earth had to do some fast figuring to beat that problem but all went well they landed just exactly where they wanted to and now for the last hour and a half they've been walking on the moon's surface they've got another about two hours and 15 minutes left of this walk that could be extended as much as a half hour okay good okay there's al shepard bouncing his way back over to the lamb and to mitchell to begin to pick up the packages and to pull the yes loading more equipment on the mat cbs news color coverage of today's walk on the moon will continue [Music] live from the moon with the voices of ours upward and ned mitchell

01:36:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=5762s)

right voice you hear occasionally from houston from the manned spacecraft center there is the capsule communicator bruce mckinney bracket and um roger with the white surface normal to the line to the front pad i say you still have three minutes remaining okay we'll leave them on there okay open okay oh damn the way back [Applause] both of them

01:38:08 (https://www.youtube.com/watch?v=8YveLxEImpA&t=5888s)

put that i'll put him in the pocket when he's through okay shepherd mitchell now on the north side of the lunar module antares they will later move the met or pull cart and scientific equipment to the west the camera will be repositioned following that movement we show one hour 50 minutes since cabin depress okay your center magazine double dog double easy i have the map roger delta delta and echo echo shake that baby up hello yeah

01:40:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=6006s)

okay training search [Applause] filmer and then put it down shepard mitchell still loading the met a long list of equipment to be loaded longer than expected when you get this equipment loaded and start moving out to deploy it to put it around on the very spots around there where it's meant to go

01:42:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=6120s)

to go and most of them in rather precise positions uh one of the interesting experiments that is new on this flight is the so-called thumper and uh over a area of 100 in our long line around 150 feet or so every few feet they fire a charge about equal to a 22 caliber charge just a little thumper as they call it and that's what it is to measure very precisely with listening equipment they will place on the moon's surface uh and give them some idea of the surface makeup for the moon we'll get more on that from dr salisbury shortly cbs news color coverage a man's fourth walk on the moon will continue in a moment tang presents tomorrow these are astronauts training underwater for an incredible mission in outer space 56 days in orbit aboard the first manned space station and two lonely space walks around it nasa trains them underwater in space suits with full equipment load because zero gravity is simulated here better than anywhere else on earth and once they're walking in free space outside of the space station this training could mean the difference between success and disaster inside the skylab they will have all the comforts of home a bedroom a bathroom a work room a kitchen and they will have tang the orange flavored instant breakfast drink with more vitamin c than orange juice the same thing is on your kitchen table nutritious tang for breakfast tomorrow [Music] the astronauts of uh antares

01:44:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=6240s)

the astronauts of uh antares of the apollo 14 flight about halfway through their first of their two walks on the moon when they start to move shepard will pull them that uh mitchell will carry the asap package that's john mcleish the base of apollo in houston and these voices are from the moon with ed mitchell and shepard okay we'll put this one in the pocket i'm already getting the feeling that they're working you can tell they're not as light and as exuberant as they were before they started complaining about suit pressure a little bit more than they were accustomed to they sound uh like men working there's some little breathless labored time to time it's almost like being in a big beer barrel practically and bending the darn thing in that suit and you try to get poles and break points where your arm doesn't have to bend it all the time this does help it's almost an evolution of a new kind of clothing camera right here still reading uneven hundreds would you say one way that it balances out perhaps the one-sixth gravity the ease of movement the fact in your arms move a little easier you appointed earlier float a little as opposed to the extra labor of the suit maybe that just about comes out even i suspect it does there that kangaroo step of course is because they can't bend their legs as much as they would if they were not pressurized so they try to hop and avoid all the leg motion in there if they could they'd rather not leave at all

[01:46:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=6360s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=6360s)

all but the weight of course is compensated very nicely by the one-sixth gravity probably enough you can't jump six times as high because you can't get your muscles or your springs coiled up enough to push it most people think you might set new high jump records or broad jump records but to crush yourself down in a sense to get your first initial spring for a big jump you don't weigh enough to crush down or coil up your springs so you really can't jump six times as high it never occurred to me and it now has changed my mind about going to the moon i can't jump six times higher than i do on earth i'm not going that gives you a chance to jump six feet you might do that if i could jump six times what i can do then i'd be six feet running a little behind that timeline now i think the last uh report was about seven minutes okay the crew will shortly be moving to their new position

[01:48:22 (https://www.youtube.com/watch?v=8YveLxElmpA&t=6502s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=6502s)

okay let's put that baby over here i mean double 35 black dispenser close-up camera dual csvs 270 millimeter camera with uh at two hours the crew is ready to move before you fit up and there they go having checked out their equipment

[01:50:22 (https://www.youtube.com/watch?v=8YveLxElmpA&t=6622s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=6622s)

roger um now we need to point the tv camera out to the alt up site [Applause] a good place though yeah if there's any uncertainty at the deployment area we'd rather go to a zoom of 100 instead of a zoom of 150 but if you think you've got a good sight picked out now we can go to 150. i think we can find a good site uh we may be a little closer to dublin than we uh than the pap shows because of the grade going up there but i think there's a level site fairly close to the south rim at all but and we'll around that general direction and give you 150 zones glad you're out infinity and they're resetting the camera now to uh to get the picture of the area in which they will be pulling the equipment

[01:52:13 (https://www.youtube.com/watch?v=8YveLxElmpA&t=6733s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=6733s)

and you'll probably be able to see that bright star playing around bstop okay yeah yes that's fine uh i've got what looks like uh one two ridges and then the horizon uh in the picture and i see a just past the second ridge i see uh it looks like two craters in line over don't be concerned if you don't see anything on your television screen at the moment that's what's uh being transmitted camera pointing where the outset will be deployed now up i'll go pick up the there i think that originally referring to is about the upper third of the screen there you can just barely see it yeah i think so i'll be moving into this picture yes we'd like to try it this gives an example of why it's difficult to land on the moon the detail doesn't show up too well at this low angle where they are now walking on the surface actually uh however it's far better now than it would be as the sun rises and the shadows become less definite yes they wash it out cbs news color coverage of the walk on the moon will continue in a month you are watching us plant some of the world's most remarkable seeds seeds that need thousands of pounds of pressure and temperatures up to 750

[01:54:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=6840s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=6840s)

pressure and temperatures up to 750 degrees fahrenheit in order to grow and in a few weeks they grow into quartz crystals of a size and purity that nature takes thousands of years to produce at western electrics plant in north andover massachusetts we grow these crystals and save over two and a half million dollars a year savings which help keep the cost of telephone service down in some 10 years we have developed the art of quartz growing to the point where our quartz now equals the finest found in nature such quality is essential because it is quartz cut into thin slices that helps transmit thousands of telephone voices at once and keeps them separate western electric the people who make communications equipment for the american telephone and telegraph company and your local bell company cbs news color coverage of the flight of apollo 14 will continue after this message next time you open a can of dog food remember there is a canned dog food without the can gaines burgers meaty moist nutritious gainsburgers a tasty combination of meat by products and meat plus all the vitamins minerals vegetables and milk protein your dog needs the choice is simple canned dog food or gaines burgers the canned dog food without the can and there's our scene at the moment as it is being transmitted yeah i think well our afr isn't working very well but if we want to get you in the field of view we'll aquarium all right

[01:56:12 (https://www.youtube.com/watch?v=8YveLxEImpA&t=6972s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=6972s)

oh [Music] i believe you're off to our left [Applause] okay you're coming in now until we get up pretty close now okay okay and we've got you in the field of view over to the left now okay i'll be coming in right now there are so many different types of craters around jake i could spend the whole epa within 100 yards of the world [Applause] okay going to your right

[01:58:14 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7094s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=7094s)

okay we're proceeding over a very fine green regolith yeah you're doing fine now looks like trying to find a smooth place to go hole either way 10 o'clock yeah impression deeper very deep

[02:00:31 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7231s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=7231s)

[Applause] around here because of a moment ago only about the lighting effect the fact that it's difficult to see where you're going uh at this low angle because you were much lower than the spacecraft was in orlando and it's a optical illusion looking a little distant it looks like it's flat but it's not well it looked like a dry salt lake didn't it in fact they're now detecting that it's as bumpy there as it was near the lamb itself i don't think we noticed that depression there at all 75 yards that might be our answer right beyond this mix these next two craters yeah i think so it's probably a pretty good spot right up here and we are in the general area of the plant offset appointment now

[02:02:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7320s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=7320s)

plant offset appointment now on the track uh it's in a depression dust [Music] is the acronym for apollo lunar surface experiments package and that seems to be writing very well surface surface explaining [Music] they finally made the timeline for delivery but of course you won't really as much as you see now that takes time to get these things put together and tested just like it does a spacecraft interestingly enough there's a whole team of people just working on that project alone [Music] and they're anxiously waiting to see how it worked today i'm sure yes indeed you're very well centered

[02:04:04 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7444s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=7444s)

right here i can see your shadows now so uh i guess it's like they can see your feet so you're on you okay about another 30 40 feet though so they're approaching the site where they're going to begin setting up the scientific package on the moon cbs news color coverage a man's fourth walk on the moon will continue in a moment tang presents tomorrow imagine living for 56 days in outer space in orbit around the earth someday three astronauts will aboard skylab the first manned space station and on this fantastic shift they will have the orange flavored instant breakfast drink with more vitamin c than orange juice the same thing that's on your kitchen table nutritious tang for breakfast tomorrow cbs news color coverage of the flight of apollo 14 will continue in a moment this is cbs [Music]

02:06:04 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7564s)

[Music] this is a cbs news special report ten years later the flight of apollo 14. sponsored by tang the nutritious breakfast drink for breakfast tomorrow here again is walter cronkite ten years after al shepard is walking on the moon he never thought he'd just make it or maybe he did always think he'd make it but uh no one else did but uh through six years of ear trouble and finally an operation and keeping in training and fine physical shape well he got picked for this flight of apollo 14 and there he is up on the moon he is right now running about 10 minutes behind on his work schedule but that's happened on these moon trips before it could hardly be laid at alan shepard's feet they have now moved out from the site of their landing uh probably uh we would guess although we don't have it specifically at this time around 150 to 200 feet they do have a some very good pictures with the color television camera showing their emotions as they get ready to set up the scientific package they are precisely where they meant to be at this time and teres landed earlier this morning almost eight hours ago now right at the bullseye for the planned landing [Music] uh

02:08:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7686s)

central station we'll did you make note that al shepard said 10 meters nasa has switched from the foot system to the metric system in the last few months i noticed that throughout this flight uh finally bringing them into line with the united states had any right into line with the rest of the world but uses the method system and incidentally a step in the direction of possibly sometime in the future cooperation with the soviet union they'll have to adopt one of the other systems and almost everybody agrees internationally the metric system is it it is the most practical i guess you can use decimals all the way without the 50 to 80 feet in a mile and all the other variables that make life very complicated from here somebody's arm was three feet long and you can start breaking it down from there okay we'll turn back on this is where we're going to deploy i guess the primary consideration of course is to find a good site yeah we understand but it's all pretty much the same the upslope is about 0 45 degrees by all types of craters but nonetheless they produce a fairly uneven surface and i think we've found a spot here as a response we'll find anywhere right let's see so but uh those two craters right there are gonna be in the way i think i'd like to move back here about five feet

02:10:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7801s)

or i can leave the central station about where i've got it i mean the uh power generator there okay this looks good to me if you're happy with it let's see southwest is right so this spot is right through those two craters i'm going to go almost this south this interesting experiment that's a little while ago that bumper and the uh mortar experiment require a range that has to be very carefully measured they've got a long cord to measure that off with for the thumper experiment they move out i think it's 150 feet isn't it these are the devices that listen to the movements in the lunar surface and one is placed 10 feet out another 160 feet out another 310 feet out from the alsup central station and then

02:12:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=7923s)

alsup central station and then after they've placed the furthest one out at 310 feet they come back along the line and fire these 21 bumper charges these little 22 caliber equivalent of 22 caliber explosives and the geophones automatically measure the reaction in the lunar surface let us think of the same uh pattern of course is uh where they have the mortar set up which is another part of that same package that will be activated after they leave it right that's a little more powerful explosive and those uh the mortar carries uh what's stained out in the same direction same area carries four fiberglass rockets uh that they that are so powered that they will go out four different distances as far as i think five thousand feet out and something like that right and uh they fire out all the way out there and uh after they've left and it's perfectly safe in fact the last thing they do before they get aboard to come home is to arm this mortar so that it's not going to go off while they're there and walking around in front of slower us than i expected yet out shepherd the commander say that it's like to be a slower process than he expected

[02:14:11 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8051s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8051s)

and uh for reference alan ed you're about two nine minutes behind the timeline at this point over 20 million minutes behind the turn that's quite a lot that lead up their slop in a hurry yeah they've got about an extra half hour uh that they believe in there is a central station and temperature is um degrees and their portable life support system about an extra half hour beyond the four hours of the program but they've just eaten that up now they just finished their program get back on schedule uh from here on out stay with the schedule they've already eaten up that half hour and then admits to the question al both were saying that they seem to feel it's going to take much longer than they anticipated this is typical when you have a lot of experiments you try to do all you can and you pick out the best ones and go on and plot away doing in order i think that uh big dish like thing we see there is the super thermal ion detector isn't it you know uh that's uh that's the one that also uh catches charges of uh the ions as they pass through the lunar atmosphere such as it is oddly enough uh it is not a zero atmosphere there are uh particles and there's some outcasts in apparently uh two hours it can be detected with super sensitive equipment that's what they're deploying now it'll take a long time to get the data correlated we'll deploy the experiments before powering up the central station

[02:16:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8161s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8161s)

i'm trying to achieve a perfect vacuum yes this is why we come out of earth orbit eventually almost everything we've had up there eventually pounds against one or two molecules a day and eventually slows down and has to come back in again [Music] hawk right now today is trying to get a picture of a point out in space pretty tricky thing to photograph a point in space but a point in space uh dew points in space actually where it is believed that the gravitational pull from the various bodies in our solar system equals zero and it's thought that at that point all these molecules and debris and so forth accumulate and just float around in space doing nothing we've lost the color television picture for a moment as was expected the tape converters went out of tape again and as you see from mission control they're looking at what we call the television business color bars we'll get the we'll get the picture back uh very shortly but they are running a half a hour now almost behind schedule in deploying these uh scientific experiment packages on the moon but the flight of apollo 14 certainly seems to be going very well i mentioned sterosa who's up there flying around in the kitty hawk and has a nicer lonely day or more left up there before he's rejoined by the men of antares he is a longtime pilot loves flying a test pilot and says that he rather likes flying alone he always thinks and has always thought an airplane should be

[02:18:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8281s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8281s)

has always thought an airplane should be built with just one seat anyway so he's got the perfect assignment for this particular flight he didn't note before taking off that he would kind of like to kick around little lunar dust as he put it but at the same time he seems to be very happy to get a flight and since there are a lot of astronauts in houston who have trained along and hard for these missions and with the cut down program we're likely not to get a flight at all roosa is indeed glad to be up there he's got these photographic experiments to make today we have not had any word from mission control in houston although we have asked as to whether or not he was able to see the landing of the antares earlier this morning it was hoped that he would he was due to be within viewing distance of it and it was hoped that he'd be able to get some pictures and now we haven't as we say had confirmation whether he either saw the landing or uh got pictures from his circling kitty hawk this spot in a space we were talking about just a moment ago uh what is it precisely that that uh it would prove if they got some pictures out there what would the picture show well they would show that the debris existed in these spots which has been a subject of considerable controversy uh years ago cordoluski a soviet block scientist reported clouds of debris in this area or in these areas and the so-called cordoloosky clouds were searched for by many other astronomers and uh they could not find them uh except for a few and they they came and went a bit like i guess was a bit like looking for for elves and there's been a continuing controversy those that see them believe them and those that don't don't and so the uh sargasso sea of space i guess that were all uh debris would catch up and park there for a while uh

[02:20:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8400s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8400s)

a while uh i guess the big question is will it park there long enough to to make for a concentration that you could detect there certainly should be some concentration but it may not be detectable with each flight we're learning a little bit more about uh space and what's out there and the effect on man particularly on this flight where there was a very detailed experiment to see if they could uh pin down the cause of little light flashes that were being seen by the astronauts particularly in the darkness uh on out there in space on the trans lunar flights and indeed uh with some detailed experimentation in advance as to the to identification of shapes and that intensity of light all three of the astronauts in the apollo 14 on the way out were able to identify these cosmic flashes as they close their eyes in the dark are cosmic they don't know that these flashes that they think may be cosmic light and if indeed this is happening while they say that it's uh they don't believe it could be serious in flight of the duration of these moon missions they're going to have to consider it very carefully for longer flights in space we're talking about those grenades and we have our color picture back as you note the grenades that they're going to be firing up there from the mortar box and these seismic well after antares leaves the moon it sets off the grenades and they will be read by the seismometer that the astronauts are leaving on the surface and are in fact deploying right at this very moment nelson benton has a demonstration of that experiment out at grumman aerospace and nelson actually take place on the lunar surface the apollo 14 crew has provided for some planned impacts among which is the plan to crash the ascent stage of the lunar module into the lunar surface after shepard and mitchell have left it for the homeward bound command ship

[02:22:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8521s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8521s)

for the homeward bound command ship and among the scientific station that is left upon the moon's surface to measure among other things moonquakes is being left behind a set of high-priced fireworks in what is called the mortarbox assembly long after apollo 14's departure the mortarbox antenna will pick up the command from the ground to fire one a twenty thousand dollar grenade that will travel five thousand feet and create its own disturbance on the surface later another grenade will be fired three thousand feet this time at another interval one will be fired one thousand feet and still another grenade feet their seismic effect will be measured by the moonquake equipment left at the scientific station and that data sent back to earth from the transmitting unit of the array of experiments left on the lunar surface the firing of these rocket-propelled grenades is designed as yet another means for scientists on earth to study the moon's structure and the grenades may be fired at an interval of one hour less or longer depending on when the scientists want them triggered all of this may not take place until perhaps one year after apollo 14 has come home walter that uh that station uh we'll be reporting back for a long time the thermal uh the nuclear energy uh package that uh will power the station will last a lot longer actually than some of the other instruments there on the moon the plutonium-238 that that is in that nuclear energy generator has a half-life of 90 years which is a very very long time which is one reason it was chosen that the fact that a fairly inert form of radioactivity can't do a lot of harm but does create

[02:24:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8642s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=8642s)

can't do a lot of harm but does create enough heat so that just just by its own decay processes to power this electric station you know i'm somewhat intrigued walter al shepard's quite a golfer i think he might be tempted to put out a mortar shot himself up here i'd be really anxious to see if he does with a simulated golf ball see uh what the [Music] [Applause] [Music] oh they're working hard as i said they're finding this more difficult than they thought and the heart rates read out just a short while ago a show shepard at 90 to 100 mitchell at 100 120 and that's as a reflection of the of the workload that they're carrying when you think of al's original heart rate at 80 that's a good 20 increase in that sense and could very well indicate that he's really putting out incredibly uh during the landing this morning which must have been exciting at that time normally off the uh he went up to 115 releasing one of the experiments from the package say it's that super thermal ion detector experiment i thought that was the one they already had up there but it's not the information i get here

02:26:04 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8764s)

now okay yeah we got it find that hard to believe but john mcleish the voice of apollo down there said that that big blob of light in the center of the screen is probably a reflection from the mobile transporter that uh a super thermal ion detector a shepherd having a little difficulty getting one of the fasteners off but this has been accomplished and pressing one cbs news color coverage of the walk on the moon will continue in this is the picture live picture in color from the moon the definition isn't the the clearest

02:28:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=8880s)

the definition isn't the the clearest but uh it is a picture it is in color you know the details did come back in there that may be the mad after all and then reflects back right into the television camera that's why we saw that large circle in there for a long time mission control just asked them to move it they asked for that movement of it to get it change the reflection angle and apparently it works meanwhile al shepard starting to deploy the passive seismometer will be going on roger esmeralda ecuador yes that's just what have we done to deserve this just when do you get to jj

02:30:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9001s)

j.j uh a few batches are being run through the loop here and uh you know what jj is that's just another code i think for another magazine or another point when you started ee or esmerelda there was one case i find this a lot more work than they thought it was going to be a pair but what did you deserve this i think that's the point of it yes right here we've lost the color transmission again for a moment shepard uh starting the movie camera the suppose they're changing another one of those tapes in the color converter i don't know wouldn't see any other reason for this at the moment we said a little while earlier that uh stu russa as far as we know uh at least nasa had not announced whether he'd gotten any pictures of the landing itself as he circled some 65 miles overhead but we are told that in one of his subsequent tracking uh orbits of the moon it would have been the second one or perhaps the third i guess the third one after the landing at 4 17 this morning at 10 11 this morning he was right overhead and he saw antares down below on the moon's surface and predominantly they have with those high resolution cameras gotten a picture of it

02:32:08 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9128s)

baby will start deploying the thumper geophone cable out to the southeast which should run off the bottom edge of our picture that's the cable on which the earphones are are deployed along which then they fire off those 21 thumper charges so this picture is black and white now while they affect your cable converter here on earth this color camera has worked exceedingly well could you tell us where you are in the uh side or pse sequencer the is being uh 10 feet north of the central station central station is the strangely enough central station of the group of scientific experiments it's the one that transmits the information gathered from the experiments back to earth and which is tied in of course with that nuclear generator which provides it the power for such transmissions and for gathering information and for getting information from earth to trigger some of these experiments such as the mortar charges which will be fired off after antares has safely left the surface of the moon that suprathermal ion detector experiment is also a part of the cold cathode cathode ion gauge experiment in case you were wondering uh called the side or the ccige

02:34:03 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9243s)

uh called the side or the ccige to stick what is known as an anchor in the cable to assure himself that he does not pull the outset package 117 hours seven according to my information here will measure flux composition energy and velocity of low energy positive ions and the high energy solar wind flux of positive ions combined with the side is this cold cathode ion gauge experiment that measures the density of the lunar ambient atmosphere and any variations with time or solar activity such as atmosphere uh may have yeah okay now you know yields information on interaction between ions reaching the moon from outer space captured by lunar gravity and those ions that escape and also measures whether or not secondary ions are generated by ions impacting the lunar surface third whether volcanic processes exist on the moon one of the things that they have been trying to determine definitely is one of the clues as to how the moon was formed effects of the ambient electric field lost rate of contaminants left in the landing area by the lunar module and the crew and the ambient lunar atmosphere pressure all those to be measured by the first experiment deployed now they're deploying the bumper hey

[02:36:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9366s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9366s)

so i haven't heard anything from them for the moment i suppose are just busy this active seismic experiment i'll produce data on the physical structure and the bearing strength balloon because they really know what that's like close at the surface where they are is this will give them a clue as to the actual makeup of the moon surface itself whether it's loose rock uh or hard packed or a little bit lower whether it's layered or not this would be very interesting too the thumpers will get them down 75 feet and then the mortar charge will get them down 500 feet information it's particularly interesting whether or not it is layered and whether these layers change in character okay that's all for this also uh uh will be added to the information from the heavy impact of the uh lunar modulus stage being uh impacted again against the moon and the s4b uh with its 11

[02:38:05 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9485s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9485s)

give a great deal of information about the subsurface structure of the moon yes well the the thumper and the and the mortar uh give information about local subsurface structure whereas the uh the s4b impact and the and and the moonquake listening is for more general subsurface structure of the moon yeah joking reference to the solar wind harkens back to field trips i think you may have cleaned something up on that one on the o2 i have no flags not my minimum cooling and not very comfortable roger i'll go ahead ed okay [Music] our coverage of this lunar walk will continue in a moment [Music] the hungry sea it eats steel plate almost anything made by man but on the floor of the ocean there's one thing spared from this ferocious appetite the trans-oceanic telephone cable every 10 miles of it there's an electronic relay station like this one made by man from western electric it's covered with beryllium copper

[02:40:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9600s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9600s)

covered with beryllium copper and almost impervious to the corrosion and tremendous pressures of the sea inside are some five thousand precision components that must operate for years without failure a manufacturing skill that with astonished jewels burned helps to make trans oceanic telephone service faster and more dependable western electric we make bell telephones we also help keep the trans-oceanic telephone system off the menu of the hungry sea so al shepard and ed mitchell continue to work on the surface of the moon now about three hours into their uh planned four-hour walk and running about a half hour behind and getting their experiments set up they're finding the work a little harder than they had anticipated and the ground somewhat rougher than they had anticipated but they are at work they both say they're in good shape their heartbeats show to be high as if they had been exerting considerable effort in getting these experiments set up but all is going well with the mission these are the uh this is the scientific package to be set up on the moon the next walk tomorrow morning is a geologic traverse that's just a walk to pick up rocks and the steady rocks and study formations by eye these are the scientific instruments that will measure uh many things on the moon's surface for a long time to come and dr noel henner's lunar scientist is with bruce morton in houston i wonder if you gentlemen would like to discuss the experiments being set up now there on the moon really i have kind of a citizens question i guess dr hinders it seems to me that ever since lunar exploration started there's been a great tendency to bang thump and fire things into the moon mortars thumpers s4b stages what does all this

[02:42:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9722s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9722s)

thumpers s4b stages what does all this bombardment of the moon accomplish this the main thing that we're trying to detect here is structure in the subsurface of the moon there are many independent lines of evidence indicating that there should be subsurface layering uh we know that the highlands of the moon are topographically higher really than the lava surfaces and we suspect to have good evidence that they're less dense this indicates that we've got a situation similar in some respects to continents on earth where the lighter material is sort of floating in a heavier subsurface and that we should be able to pick up this layering with seismic methods we also know now that the lava flow found at pile 11 and 12 do not represent the entire lunar composition they represent maybe a percent to three percent of the interior composition and a funny sample of it at that from this funny kind of melt we get inside partial melting we know that there's a different composition inside if you take an apollo sample and squeeze it at pressure is equivalent to great depth in the moon the sample becomes very dense and heavy it becomes so heavy that we know the moon can't be made up entirely of that material because the whole moon would be much heavier than we know it to be so we know that there is structure and layering in there at some depth we don't know what what depth and its seismic techniques are we're hoping we'll shed light on that so there's a layer of one kind of material then a layer of another and by by making the whole moon or pieces of it reverberate this way you can trace these different kinds of material right the seismic techniques essentially give you a velocity of seismic waves to different rocks the velocity corresponds to the density of the material at first order the higher velocity the denser the material so expect these compositional

[02:44:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9841s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9841s)

material so expect these compositional differences to be reflected in velocity differences which the seismic techniques should pick up geology used to be mostly a matter of picking up and classifying rocks but there are these new methods now aren't there chemical methods methods that come out of physics right there's been a fantastic revolution in earth sciences in the last two decades it's been the application of chemistry and physics that's brought about some of the i might say revolutions but we can't forget that it still takes the geology to put all these measurements these detailed measurements and make context we've got to know where the sample comes from we're finding that out about the lunar samples so many of them appear to be foreign to the sites we're going to we landed in the mari where the lava flows occur and yet we found samples of material that looks to be from the highlands by knowing where these samples are picked up and the relationship to craters for instance we can then sometimes extrapolate back in time and in the geography to find out where these samples may indeed have come from now the people who say that we ought to make a lot of moon flights always say well you couldn't just land in two or three places on the earth and really learn anything about its structure this is the third place that we've landed on the moon are we going to uh are you going to have any answers at the end of this mission as to what the moon is made of or how it's layered how it's put together each mission takes us a step further along the line towards solving the problems of gorge and evolution it's doubtful i think it will ever get to a final solution for the origin of the moon but before the program started we estimated that we could make good use of at least 15 varied lunar surface sites that we would need to get a good feel for and get samples from to put together the first order picture of lunar history and evolution it's obvious that the united states isn't going to make that many

[02:46:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=9960s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=9960s)

isn't going to make that many uh at least in this apollo series obviously it could be something later on uh has there been any thought given to uh to talking with the russians about uh you send an unmanned one to this area of the moon and we'll send a man went over here and try to make some sort of exchange on that crisis well i really can't answer that question did you know nasa had representatives over in russia not long ago and i'm not familiar with the total discussion that went on would it be helpful would you learn more that way everyone counts what do you think is the most oh how to put it the best kind of new find that could come out of this one are you looking more towards this experiment package that we see being set up now or do you think picking up rocks is they're going to concentrate on tomorrow is likely to tell us more the combination one can't predict the head too well sometimes what these instruments will tell us we're very surprised some of us anyhow from the apollo 12 magnetometer it appears to be investigating the magnetic field of the moon to be probing to great depths in the interior of the moon and giving us information on the electrical conductivity which in turn we can translate into temperature profiles in the interior and it was oh let's say five years ago nobody really even thought that that was a possibility uh the rocks we expect to be different are far more we're sitting here hoping and praying that they'll be different we don't expect them to be like the lava flows from 11 and 12. as you're well aware there was some mysterious material picked up at the apollo 12 site so one of my favorite space nicknames of crete the creep the k stands for potassium r-e-e for rare earth elements and the p for phosphorus there's a rock picked up and existed in the fine soil material it's very rich in these

[02:48:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=10080s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=10080s)

material it's very rich in these elements and it appears a first cut to answer some of the mysteries that were obvious on apollo 11 like how can the soil be older apparently than the rocks from which it's formed but there's a foreign component in that soil something that's been blasted in presumably from highlands and other sites such as maybe falmouth has contaminated the local lava flows there is much reason to suspect that the material contaminating the apollo 12 site or polluting it if i use an n word came from falmouth formation and the foul moral formation exists fairly near the apollo 12 site but also should have existed in the crater copernicus so when the copernican impact occurred chances are great that it threw out some the primal material also and we know that one of the rays from copernicus and d does cross apollo 12 site so there are many people betting that we'll find much of that strange creepy material at foul model i think personally just for fun i'd like to see it come out something entirely different but i guess is sort of a compromised landing site it isn't really the highlands is it it's not the highlands in terms of what the typical lunar geologists would think of the highlands we tend to think of as being a very densely cratered areas in the south part of the earth-facing hemisphere and most of the the backside the fomo is a funny one in that sense it was blasted out of whatever the lunar crust was at the time of that grey impact that created the imbrium basin there was something which at that time we might have called highlands they probably came from depths of up to 50 kilometers from beneath the surface so in that sense it's a representative highland sample but it

[02:50:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=10200s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=10200s)

representative highland sample but it does not record the oldest history that we see in the southern highlands well maybe we'll get to that on a later mission meanwhile hopefully some surprises on this one walter talking about the moon being punched and thumped and explosives fired against it as you were bruce you know the impact of the s4b third stage of the saturn booster when it impacted and was heard through the apollo 12 size thermometer they put a warbler effect on it so it came back to earth as a woo and some of those who heard it in houston felt that the poor old moon was complaining a little bit about her the man in the moon may be getting just a little bit annoyed however man is learning something about where that man up there came from through all of these experiments and now we learn that the this first walk on apollo 14 is going to be extended for the 30 minutes that is permitted they have not overused the consumables the cooling water and the oxygen and the battery power they have for their communications so they're going to stay an extra 30 minutes at this time but they're running more than that behind on their experiments and just a moment ago we heard that they're having trouble now keeping one of the experiments that super thermal ion detector experiment called side upright it keeps tilting over uh it's too light to stay they say in this particular spot and that's delaying them even further the ground told them to get that one working at least that's the first order priority and then to move on to the other experiments so obviously they're beginning to worry about their timeline on this first walk it's now due

02:52:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=10321s)

on this first walk it's now due to end when the cabin is uh re-pressurized at 2 27 eastern standard time this afternoon that's about an hour and a half from now they'll actually re-enter the uh spacecraft sometime before that mitchell will re-enter at 218 shepherd at 2 23 p.m cbs news color coverage of the walk on the moon will continue in a moment at western electrics allentown cbs news color coverage of the flight of apollo 14 will continue after this message tang brings you the morning as few men have seen it the sight of our own planet coming up over a strange horizon in space earth rise now two more men will see it and with them tang the orange flavored instant breakfast drink with more vitamin c than orange juice nutritious tang for space men and earth families so we continue to watch these points of uh the bright sun's reflection which are indicative of the experiments being deployed on the moon and the true astronauts there going below the upper double rate understand right on one hand these men are working too hard to uh be there all the way to the upcoming one hand very exactly

02:54:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=10440s)

very exactly about their work they're not quite like pete on that okay the gfo deployment maybe when they get to tomorrow's long walk they will be a little more ecstatic about their labors oh it's a matter of mostly just of examining rocks and their surroundings and gathering rocks uh nothing is complicated to setting up kitties overhead is scheduled for a plane change at 118 hours 9 minutes 35 seconds ground the last time plane changes to keep it on a course uh roughly over the landing site and in a position where it could make an immediate rendezvous should then terry's have to leave the moon earlier than planned this would come about only if there were some emergency in the supply of life-providing consumables air water battery power as it is scheduled to leave the moon just about 24 hours from now and tomorrow afternoon after the second of these moon walks this one uh the astronauts uh shepard and mitchell this is houston how are you doing a lot of problems in just getting the job done thank you honor dave i'm proud of and rewinding the antenna

02:56:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=10560s)

proud of and rewinding the antenna roger it's the antenna on the central station of the of the total uh scientific station being set up on the moon by these men it should have been done well over a half hour ago they continue to fall behind on the schedule a little while ago they were having difficulty with causing one of the wires shepard now aligning the central station antenna i kept coiling apparently and pulling over one of these very light experiments [Music] they have special flat wire to supposed to prevent that sort of thing but apparently it doesn't well let's it's really hard to quite grasp when we watch these pictures come to it for 238 000 miles out there on the surface of the moon and then uh at uh what seemed to be almost in the flight plan was a thought that maybe this camera wouldn't uh be adjusted properly for this walk across there since they had to set it up first and then walk out into the picture and there was a plan that if they had time one of the astronauts would go back to the camera and focus it a little better than this [Music]

02:58:01 (https://www.youtube.com/watch?v=8YveLxElmpA&t=10681s)

[Music] turns out they haven't had that time this deployment of the transmitter is one of the first orders of business after getting to the al sup site three hours 13 minutes i have my first jio phone in the ground and in this soft ground they go in vertically without any problem and they push right on him okay that's the ten foot one these are the geophones and little devices that listen to the charges that will be fired later gonna turn switch number one clockwise and switch number five counterclockwise are you with me i'm with you go mitchell has deployed the first of three geophones number one clockwise counterclockwise [Music] is find you out there okay

03:00:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=10800s)

find you out there okay okay a good line for you is the horizon intersection of that checked as to whether the alsup transmission was being received okay uh we've also got the psd final deployment okay i will do that now that's the first conrad bean type thing we've heard from the moon deploying the laser reflector now we laser reflectors left by apollo 11 and 12 have worked exceedingly well and i've enabled three hours 16 minutes since cabin depressed scientists here on earth uh by the use of this direct beam that is the laser uh firing it to the moon bouncing it back knowing the precise speed of the laser to measure far better than man has ever been able to before the exact orbit of the moon exact distance of the moon or from the earth but all points in the in its

[03:02:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=10920s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=10920s)

but all points in the in its orbit of the earth down to within i think they're within 100 feet they believe now of the measurement something of that kind extraordinarily close they're also able to measure the wobble of the earth on its axis which they've never been able to precisely measure before it gives them a point of reference out in space which they can do a lot of this celestial measurement he's putting another one down now at this particular spot as we get more of those on the moon we have more reference points of course and the measurements can become even more precise with each added point at which these laser beams from earth can be aimed so mitchell is off of our picture i believe over here on the left now as he gets out to the 310 foot uh distance from the alsup package the furthest of the geophones as dr salisbury our expert from the air force cambridge research center was mentioning to us here a year ago shepard ranging in the 70s in mitchell ranging in the 90s this uh cheerful ones are really 117 hours 37 minutes around the last time not particularly exotic instruments they are used all over the world in all sorts of geological research and particularly than a matter of oil exploration doing exactly the same thing they're doing on the moon right doctor solidworks testing for what's underneath the surface

[03:04:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11041s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=11041s)

what's underneath the surface trying to figure out the structure is um mitchell using the phrase we wondered if al shepard was participating with him in the mission that was supposed to be mitchell's alone degrees and level over the difficulties of uh planning on earth with earth gravity for working on the moon uh in its peculiar environment in one sixth gravity is emphasized again here all of these experiments i've been tested and retested on earth here many many many times but now when they get up there to do them stretching just stretching that cable out along the surface of the moon and anchoring it through the moon turns out to be much more difficult in one sixth gravity the cable doesn't lie there as steadily as it does on earth than the tests and gives them some new problems some of those things we learn just tidbits of information perhaps but

[03:06:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11160s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=11160s)

perhaps but when they're added up to make the whole body of knowledge that is coming back to us from moon exploration cbs news color coverage of man's fourth walk on the moon will continue in a moment cbs news color coverage of the flight of apollo 14 will continue in a moment this is cbs reaching for them [Music] this is a cbs news special report ten years later the flight of apollo 14 sponsored by tang the nutritious breakfast drink for breakfast tomorrow and western electric the people who make communications equipment for the bell system here again is walter cronkite now with just about an hour left of this first walk on the moon for 47 year old alan shepard and 40 year old ed mitchell they're just about two-thirds the way through their experiments uh the packages they have to deploy to report back to earth through a central control station that will be transmitting for years from the

[03:08:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11280s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=11280s)

will be transmitting for years from the moon and let's listen angled in on this cable this is ed mitchell right here he's uh about to begin to fire the so-called thumper that's 21 charges uh about the equivalent to a 22 caliber charge little one inch long pellets okay the lip is deployed 100 feet west of the central station it we need to get a calibration on the geophone so if you and i would just stand still for a moment then we can give you a go to command stopping these geophones are so sensitive that the movement of the astronauts on the surface the uh cover is off of the laser and it's completely clear they're going to stand absolutely still while uh the uh here on earth the with the telemetry they get the baseline they did not move during the cover removal uh how the earth the moon is shaking at this point if at all and then you can do it without uh moving around we'd like to get an emu status report and then they will get the uh these thumpers going these 22 caliber charges [Applause] 0 i have no

03:10:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11400s)

roger got it yeah this is houston uh your goal for bumper activity we will require that you and al stop 20 seconds beforehand and let it quiet down they're very sensitive okay you're killing it from all three phones that's affirmative okay there goes the first one okay do i need 20 seconds now that's affirmative hey started counting counting down for 20 seconds and then they'll fire this little charge i don't know whether we'll hear it or not through their microphones five four three two start over five four three two i didn't one anything houston right here we copy standby nor did we hear anything the sound wouldn't carry in the vacuum presumably that house they want to take fear that's not a child sound doesn't care at all i thought this small atmosphere that of the moons was enough to carry a sound chart but it doesn't

03:12:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11526s)

ed this is houston we saw an arm and a disarmed signal on that we would like you to attempt to fire squib number one again at the same location over okay i haven't moved i'll help you hold your position or give another five four three and they again stand quiet so that their footsteps don't call and cause any small seismic disturbance for uh that's primitive six frames per second it was uh phenomenal 16 minutes and we ran for almost 20. okay the little ball indicator was not indicating empty okay you know i'm ready go this is going to take 20 seconds for every one of these shots since we can't make out in detail uh what they're doing in our picture it's too far distant and a little blurry and uh we can't hear the charges throw up anyway

03:14:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11640s)

up anyway let's instead go down to houston where bruce morton has another moonwalking guest with him captain pete conrad of apollo 12 and uh welcome to the cbs news broadcast of this flight i'm wondering if uh if you could uh perhaps comment for us on the difficulties these fellows are having the difficulty of working on the moon i don't recall that that you had quite that much trouble setting up the experiments conditions have changed on the moon no i don't think that i think they've probably got a little bit tougher equipment to work with walter uh the name of the game is to do something more each time and uh job first time out after neal and buzz proved that you could land and at least get out and wander around was to try and do a useful day's work up there and i think we showed that you could do that our outset package the five experiments were all equipment that all we had to do was set it up and leave it alone these guys are out here now firing triggers and handling uh i think a little bit more difficult equipment we uh we recommended on on apollo 13 originally that you stay out longer and i think what we're trying to do here and what they are showing is that we can do more and more sophisticated tasks up there in this environment and uh each hour that's spent by a succeeding crew they should get uh more done per hour uh we're trying to uh to establish also what a useful lunar work day is up there and uh perhaps uh these guys are going to stay out longer than we did and i think that uh and i'm confident that they'll be

03:16:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11762s)

uh and i'm confident that they'll be able to do it then 15 should go a little bit further so forth cause pete you did at least some old-fashioned physical work you had to whack the power supply container open with a hammer as i remember well i uh i like to think of that as uh we paid uh or we saved 25 million dollars worth of equipment with a little ingenuity on that one and i sure hate to have seen that package up there on an unmanned probe because it wouldn't have gotten deployed but uh i'm not don't get me wrong i haven't a thing against unmanned probes actually the name of the game here is unmanned and man combinations to get the most out of what we're trying to accomplish in learning how tired were you at the end of one aba dda well we'd had a long day and we were quite tired i didn't sleep longer in about four hours but i had a problem that you may or may not remember i had worn a hole in the boot on my flight suit about 10 days before the flight and they had to rush it back to the factory and put a new boot on it and by that time my liquid cooled underwear had been uh made ready for flight and its final inspection had been sealed in the flight bag that was going to be carried in and so i when i refitted that flight suit i did it a little bit by guess and so forth and i only used my uh cotton underwear now these tubes take up a certain amount of room and i thought that i had made enough allowance for the extra room that this liquid cooled underwear was going to take up but it turned out that my legs were about a quarter of an inch shorter than they should have been and uh believe it or not there's no way to shrink a quarter of an inch so between my shoulders and my feet i i had a extremely tight fitting suit now it worked that worked better outside but when i

[03:18:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=11882s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=11882s)

that worked better outside but when i was back in and depressed and trying to stretch out my bunk i kept trying to figure out somewhere i could squeeze a quarter of an inch off myself because that was really like being caught at night and it woke me up in the middle of the night it really got painful and i didn't want to bother al and but after about an hour i woke up and he got up and and actually let my boots out for me and we adjusted the suit up there in the middle of the night and i think that towards the end of our second eva because we'd had a short night's sleep uh that you know we were getting tired there's no doubt about it we spent two 22 hour days with a landing and a rendezvous and two evas and uh that's an awful lot packed into about 48 hours that's also a hazardous spaceflight i never knew existed looking at this crew it's it's hard to see very much now but when they were closer and you can see them they seem to be moving around about well i was gonna say ed's got himself a little skipped there i noticed and i found uh more of the waddle back and forth from one leg to the other uh best for me i did skip a little bit that's an easy way to keep when you're airborne to keep your your body in the right position and to me that was more tiring uh neither being really tiring but i i chose to run in a little different manner uh i think it in the latter little 16 millimeter movies that we brought back like you can see that sort of throttle that i had now you really don't move much faster than you do on the earth because if you take a really big step which you can do you're airborne so long that your body you have nothing to to keep your balance with and if you just get airborne too long you're going to start either pitching over frontwards or backwards or

[03:20:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12000s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=12000s)

over frontwards or backwards or sideways so i think they determined from our traverses and distances that we covered in the amount of time that it took us and we were actually moving at about a nice normal walk on the although it was much easier of course and we were carrying equipment and things like that because this met allows them to carry more equipment and do it further they'll be able to uh move i think a little bit easier by pulling the met then uh al did carry in the hand tool carrier that we had and the met got involved uh that way people were thinking about that before our flight but they didn't want we didn't want it on our flight because we still had to establish just how much work man could do there so the met came along for uh 13 as i remember they were going to use them i'm not really sure that right now but we had a great deal of discussions after our flight in the uh several months after it with jim and fred hayes about different ways to get rid of his tool carry one of the original ideas we looked at if you remember was we carried the survey or tv camera back in a backpack on my back and we were looking at ways to make a tool rack on the back of each hand's plus and then one guy could pull the other two the tools that he was going to use off the other man's back and uh but they they had so much equipment that if he became obvious that we needed something even larger than what you can accommodate on the man's back on this quest so the met evolved the way it is right now and then of course we want to go to the rover yes excuse me uh uh bruce could i ask me something it seems to me that uh watching you fellas walk on the moon it looks like you're on a trampoline and i wondered if it feels that way enough uh i imagine more of us on earth here walked on trampolines and have

03:22:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12120s)

here walked on trampolines and have walked on the moon and it might be a term of reference for us is that the kind of reaction you get well i i i don't think so walter on a trampoline your foot sort of goes into the trampoline and then the trampoline throws you back out of it and you have the sense that something else is accelerating you upward where the lunar surface is just like walking on the ground uh in that it doesn't give uh also you have this lunar ovary shoe on so it and you're lightweight you're really not aware that your foot is has sunk into the lunar surface or anything and i got you've got to remember also this backpack weighs 120 pounds and it's up on your back now although it doesn't weigh 120 pounds the effects of momentum are there and you'll notice everybody's leaned over at a pretty healthy angle and that's to keep the combined center of gravity of your body uh you know so that you don't fall over backwards you are very conscious of the momentum effects when you step off and that's one of the reasons you don't want to leap too high because you're pushing off from your foot your center of gravity of this combination is higher than it is in your normal body with this big mass on your back and it's very easy for you to give yourself a rotation when you pitch push off and that that's why you you really don't move much faster than you do here on earth because if you push off for a bigger leap you usually get this kick forward before any of you went up that uh if you fell over and got into a horizontal position on the moving surface you might have difficulty getting upright again under your own steam uh does that still seem to pose any kind of a danger no it did it sure doesn't of course i did fall over up there but also we spent a lot of time practicing up to 20 25 degree slopes in our pogo simulator

03:24:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12241s)

25 degree slopes in our pogo simulator over here getting up uh if we fell down and the only thing that we discovered was that if you fell head down more than a 20 degree slope you would have to slither around you couldn't get yourself back up with your head down a greater than 20 degree slope but otherwise you just had to push with your arms and bend your knees and you'd get yourself completely airborne with your knees ben and just really come to a partially upright condition with your knees bent but then you could run your legs you could run yourself underneath yourself and raise yourself the rest of the way i think it sounds funny but you can do it i don't want to start any inter-service rivalry here so since none exists today uh i don't want to start it but uh how do you account for the fact that the third and fourth and fifth and sixth men on the moon uh where there isn't a drop of water we're all navy fellows well you left somebody out you know neil was a navy pilot before he went to nasa i have to get that plug in there he flew under he flew under civilian uh status but they're all right that's the fact that he got it he got his early aviation training in the name the only thing i can say is the navy's around to serve and we serve wherever we can and um just do the job that's that's about it uh i'll tell you though uh it's a lot easier and less scary going to the moon than it is landing an f4h on the back of a carrier at night i'll guarantee you that i think wally sharon would probably agree with your feet he's sitting here beside me nodding uh hardy agreement at night cat shot night landing and on my mind always separated the men from the boys and i'll be the first one to tell you that my heart rates were a lot higher on those and i have that terrible feeling at night the back of the boat fly a great hop and let down out of a beautiful night sky into an overcast to come aboard that boat and uh and that's when i'd have these second thoughts like how did you get in

03:26:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12360s)

second thoughts like how did you get in this position you dumb idiot but really that's uh that's quite a thrill to me and and always will be uh carrier ops and uh bruce and pete they're still uh undergoing these uh thumper uh experiments right now they just pulled out the middle geophone and they're working to replace it uh so they're still having their troubles and it looks like they may not get to pick up all the rocks they wanted to on this walk since they've got less than an hour left and they are way behind almost an hour behind on their time schedule do you have anything more bruce that you'd like to ask pete before we uh have a little commercial break here well i'll be happy to wait for a commercial i was just you seem to have a lot of fun walking on the moon uh this has been a fairly business-like walk so far today but i we all i think had the impression that you and alan bean were really having a good time out there well you know a lot of people said that but those are people that don't know me and i maybe i get a chuckle out of wally again i think volley will vouch for the fact that i were much different up there than i usually am down here anyhow just that people don't know me that's all i think pete too you're on the timeline and they're working hard to hang in there and i i detected the fact you were very satisfied with the way things were going on and i think al and ed are too but it's a case of working a little bit harder which is what you explain when we started talking today well raleigh really and and i'm not detracting from what these guys are doing up here one bit uh because they've surmounted a lot more difficulties all the way along here than we had but al bean used to ask me about six months before the flight why kept making him hustle so much and i told him that my experience has been that no matter how well you know a task down here on the ground that if you don't just go at max afterburner all the way you're just not going to get the job done and one of the first things he said

[03:28:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12480s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=12480s)

done and one of the first things he said to me after we got back in from the first eva was that i was right that he now knew i kept hustling them for six months before the flight to get every task done just as fast as we could do it down here and we just barely did hang on our timeline you know what's that and uh of course as you mentioned earlier adding on as much as you can to get more work for unit man they're finding it out this time yeah well i think you got to be careful here to this geophone and change they they expected that the phone might fail and they'd have to stop and change and and really we had less sophisticated equipment to work with than they're working with and and i think we have to expect that that you're going to run into delays and uh i noticed that the s-band antenna didn't deploy quite correctly uh this time you know if it pops out all the way mine jumped about three feet off the ground or off the lunar surface up there and i was saying i was waiting for it to hop in the air and it didn't do it and i could see that it hadn't deployed quite correctly and then it had to come over each one of these things adds a little little delta time on there and perhaps they'll get to a place here where they can make up some of it isn't too critical if they miss some of the rocks on this first walk if they get the full second walk in tomorrow uh the only thing that would be a difficulty is that they couldn't get the rocks today and then something occurred that they had to lift off early and they would have missed the rock collection cbs news color coverage today's walk on the moon will continue in a moment tang presents tomorrow imagine living actually living for 56 days in outer space eating and sleeping and working in orbit around the world

[03:30:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12601s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=12601s)

during extended flights reacts to weightlessness over long periods of time and on board this space shot of the future they will have tang the orange flavored instant breakfast drink with more vitamin c than orange juice the same tang that's on your kitchen table nutritious tank for breakfast tomorrow back on me back on the surface of the moon they're still working with us hell this is houston uh we need to have you stand still again this is 15 of 21 uh test firings being picked up by the geophones you ought to be on youtube that was uh when you last used some evidence of ed mitchell this 40-year-old navy commander uh the lunar module pilot uh who has it by his own admission a perfectionist is getting a little bit annoyed with the problems with the thumper go fire let me try it once more there's another one that has not fired he's had several problems uh several times it has not fired uh the geophones and the ground were pulled out he's having a lot of trouble with this experiment a moment ago he said uh i was going to break it in half if it didn't fire on that one right when he got my series of no firing all right you move on uh during one of the training sessions here on earth the piece of equipment failed and everybody uh among the space people watching the test were startled to see mitchell pick it up and break it over his knee like a

[03:32:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12720s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=12720s)

it up and break it over his knee like a golfer with a errant golf club so when he said he thought he was going to break this one in half they might have taken him seriously there on earth we're not next to you up on next station next to the exquip three hours 49 minutes since cabin depressed dad mitchell continues to get these misfirings of that thumper it might be uh three two one i got a good one that time three four five roger understand good shot on your igniter 17. 16. i suggest it might be time to get the top knot for the little one's ears he's going to be a little annoyed they are running quite a long way now behind the timeline they were supposed to have almost uh an hour after finishing with this thumper for uh for various

03:34:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12842s)

for uh for various rock collection experiments setting up the mortar package and rock collection after setting up the motor package and activating a safety switch on it they would have had just about an hour before they had to button up the cabin at the end of this of this first walk they're not going to have anything like that apparently they have to button up by 2 27 p.m eastern standard time it's now uh 132 eastern standard time and they are still working with this thumper experiment roger ed in fact they've got about uh four more of them to fire before they can move on to something else takes 20 seconds for each so we've got a couple more minutes of this at the best immediately after this shepard is supposed to scratch out a 10 foot square collect as many half inch diameter rocks as possible from within the square and collect a nine pound soil sample from the same area that's the first uh other than the contingent experiments the contingent rock collection which they gathered as soon as they got on the surface which they did be sure they had some rocks they had to lift off hastily this will be the first set of rocks to be collected since that time they have a little scale right there on the uh rickshaw cart that they're pulling behind them they've got a little scale on there that he can exactly measure there's nine pounds of soil and from there they fire mitchell activates the safety switch on the mortar package both crewmen then walk over to dublin

03:36:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=12960s)

over to dublin that's the uh there's two superimposed small craters to collect documented samples around uh dublin after firing like a proposal houston man space center five four all right and we only have one left okay uh how many positions do you have to go about 20. and above my last position beautiful okay okay and uh bear in mind that uh you told me you started with charge number zero so zero to twenty is twenty one charges and we come out even yeah i understand that i've never seen one fire on

03:38:08 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13088s)

the year 1970 for instance or in 1971 what's the first year of the decade [Music] we went through a whole business you know when we returned in 1970 we were starting a whole new decade until somebody somehow smart alec decided that that wasn't right at all we were finishing up a decade with zero you don't start him we'll see start him with one sure the year one one of his complaints here of course is the fact he didn't fire flight hardware before that uh okay go ahead with the last shot ed cbs news color coverage today's walk on the moon will continue in a moment [Music] the laser beam it was still just a gleam in the eyes of scientists until 1965 when engineers at bell labs and western electric became the first to put the laser on the job in industry the job piercing holes in industrial diamonds to make thin telephone wire today western electric uses the laser to cut material for thin film electronic circuits we also use the laser to measure and to weld tiny parts for equipment we make for the bell telephone network someday the laser beam may transmit telephone calls and other data

03:40:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13200s)

telephone calls and other data someday you may find your perception over one western electric we make bell telephones we were also the first to put the laser beam on the job in industry the pink legs stuck yeah back on the moon with the astronauts shepard mitchell let's listen i think we probably have the whole changing strategy here you have 18 minutes until you have to be back at the mesa 18 minutes in 3-0 extension is what we have is that correct that's roger you are three hours and 56 minutes into the eva at this time okay in that case then we will hire the motor package at this time before we leave did you copy that push number five is clockwise roger i now copy switch five clockwise and save okay

[03:42:07 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13327s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13327s)

houston after arming the mortar pack we'd like you to proceed back in the general direction of the limb and uh selecting a suitable area end route collect the comprehensive sample and try to pick up a football sized rock on the way over and i'll give you uh periodic reports on how much time you've got left until you have to be back at the mesa okay uh great 15 minutes now to get back to the lunar module to begin storing equipment uh process that takes uh roughly a half hour itself they've got uh about 30 to 40 minutes worth of experiments you have to do in the matter of rock collecting and 15 months to do them so clearly and they're not going to be able to complete all of the rock collection that they had hoped for we don't know because we have not heard confirmation from houston that at least while we were tuned in that shepard managed to get a rock

[03:44:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13440s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13440s)

that shepard managed to get a rock collection that originally had been playing for the period while mitchell was working on the on the thumper sometime within the next year now an ad mark four hours into the eva okay with the half hour extension we're working into a four hour and forty five minute ema duration we're at 118 hours 19 minutes ground elapsed time and alan would you confirm that you have the extension handle uh off of the bumper jeep on anger yet to the inner ring allow you to get that exactly roger bubble tangent to inner ring and almost due north so this page west is okay okay both army switches are on the border number five is going back counterclockwise okay stand clear

[03:46:06 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13566s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13566s)

okay switch five is armed okay you got to save your heart 15 feet back 15 feet away when that cable's only 10 feet long that was clever and you got the safety rides the two switches on the back and switch five beautiful kitty hawk accomplished her plane change by the book now circling the moon on the 19th rift this 37 year old air force major stuart fisa up there in the command module a different mode of traveling ensuring that uh rocks compared with the number there's a few boulders lying around and there's a few spots around some of the craters but by and large it's a powdery surface way back with one of our flight controls bathed pretty well how about keeping here a couple of lunar golfers coming back with a golf cart

[03:48:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13682s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13682s)

okay we're coming back down here owl we've seen you come across the uh tv camera and it looks like you've gotten back to the mesa here with about 10 or 15 seconds to spare on our mark but we do have plenty of time for the nominal closeout so we don't want you to rush that just go through the procedures and we'll take the timing as it comes when you have a moment we'd like to get an emu status report okay close-up procedures take uh just a half an hour and uh shepard mitchell returning with two small football sized rocks and f-44 field of view right now it's pretty poor right now okay all right okay okay can you elevate the camera a little okay very good okay good very good okay oh damn it bear with me

[03:50:08 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13808s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13808s)

that's almost too too much finish up a day's work and come back and spill your carefully documented rock samples and with all the other debris i i don't know that that's really what happened he may have already sealed them in separate uh containers they do that they've got separate little plastic containers that they put these uh rocks into as they document them and that wouldn't make it too difficult to pick up the pieces if they're just loose in a bag it kind of destroys the documentation about where they came from and careful photographs of the spot where they came from apparently switching jobs with al shepard pulling the med bag documentary location shots of uh the comprehensive sample sticking on jj and i'm not sure 4-0 roger jj 40 for the comprehensive sample area jj is another one of the camera magazine designations [Music]

[03:52:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=13920s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=13920s)

that's right there they've got enough letters and numbers nomenclature to dazzle flight plan here there's a real classic one uh such as cm40l 80 bwbr kt and each one has some significant statement but it takes about a paragraph to explain it one way bag is going in the uh this just keeps the conversation rather short so you can get it right take an additional way back and put material from the immediate vicinity of the lamb into it to fill up the src we request that you drop a documented sample by again it is a tag over okay the src is a sample return container written by the kid about the src and he did it again never made it on the camera i think he had put it on but didn't start negative oh i'm sorry i take it back we did put it on the crew will take them into the limb with them between eva's looks like a secondary okay

[03:54:13 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14053s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14053s)

cbs news color coverage a man's fourth walk on the moon will continue in a moment tang presents tomorrow imagine living for 56 days in outer space in orbit around the earth someday three astronauts will aboard skylab the first manned space station and on this fantastic ship they will have the orange flavored instant breakfast drink with more vitamin c than orange juice the same thing it's on your kitchen table nutritious tang for breakfast tomorrow cbs news color coverage of the flight of apollo 14 will continue in a moment this is cbs version nine [Music] this is a cbs news special report ten years later the flight of apollo 14 sponsored by western electric the people who make communications equipment for the bell system

[03:56:00 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14160s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14160s)

the bell system and tang the nutritious breakfast drink for breakfast tomorrow here again is walter cronkite and astronauts alan shepard and ed mitchell are just about to complete their first walk on the moon the long axis of the camera is perpendicular to the sun we'd also like to move the camera so that in this orientation we're still doing the lamb over [Music] four and a half hours [Applause] it's full putting the uh small samples of small rocks from the sample in the way bag along with the two small football rocks [Applause] football rocks are in one way bag and you're adding another way by containing the small rocks [Applause] the small rocks will also be carried into the limb in a way i've got bag 70 millimeter camera to go not very heavy but thinking about volume [Applause] okay ssd's closed wow

[03:58:07 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14287s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14287s)

[Applause] defines from the comprehensive sample and the extra pies that are operator we collected near the lab okay pride recopy those in the src 70 millimeter cameras [Applause] okay 44 peak normal roger and uh we might as well go to 25 on the zoom out [Applause] i just zoomed by you [Applause] foreign [Applause]

[04:00:02 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14402s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14402s)

contains two immediate football rocks and the small rock from the comprehensive sample [Applause] 270 millimeter cams 360 millimeter mag map lens by brush assembly [Applause] src number one sealed and close up camera off [Applause] okay that's gonna be uh yeah okay four hours 29 minutes now okay [Music] oh

[04:02:12 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14532s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14532s)

here thank you all right we're looking at uh 14 minutes and 20 seconds to schedule the end of eva about 12 minutes and 20 seconds to repress you've got a half an hour margin in there a half hour margin in addition [Applause] do the best you can and we'll keep you [Applause] posted all right everything on your clothes [Applause] okay come on around the leg

[04:04:08 (https://www.youtube.com/watch?v=8YveLxElmpA&t=14648s)](https://www.youtube.com/watch?v=8YveLxElmpA&t=14648s)

[Music] [Applause] they're cleaning up their suits now uh getting the dust off all this lunar dust cleans on them [Music] all right they're dressed well for an evening a little too carry much of it in floats around inside with all the delicate computer machinery and switches and whatnot could cause trouble that's what you worry about although by the so-called military specification was really matched on all this equipment that's sealed up quite tightly each switch has a cover over it and that's why for example that uh a board switch while it's very wide and if it was a solder ball a little ball of fire that possibly came off on the inside and that caught me at the contact we anticipated this kind of thing the dust and uh water alien uh material but they can breathe this is one of the things they worry about too when they're trying to stay this will as these hammocks are swung anyway he's saying he want to get a good dust job there so he's going to be sleeping right above it they're going to be ready for sleep too they've been up almost 20 hours now already and they have another three or so hours to go before they can go to sleep they've got to take off their suits and store the gear

[04:06:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=14762s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=14762s)

take off their suits and store the gear then they've got to recharge the portable life support systems have them ready to go in case there were an emergency recharging with water and uh and oxygen and uh and debrief houston be debriefed on a walk eat and then go to sleep our coverage of this first of two lunar walks by shepard and mitchell will continue tomorrow forget everything you've ever known about size forget that an inch exists we're taking you into a world where a speck of dust is a boulder and a human hair a rod it's a sub miniature world that we're working in now at western electric and bell telephone laboratories a world of complex electronic circuits some so tiny they can pass through the eye of a needle at western electric research engineers are finding new ways to make test and assemble these circuits we'll be making them by the millions for new phones and equipment bell telephone companies will use to serve you this is the kind of thing we do at western electric finding new and better ways to make the things your phone calls are made of back on the moon al shepard ed mitchell are just about to complete their first lunar walk after four hours and a half [Music]

[04:08:30 (https://www.youtube.com/watch?v=8YveLxEImpA&t=14910s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=14910s)

uh and oxygen that they have left in their affordable life support systems roger thank you ed about 375 is what i was talking about earlier that's the pressure in the suit right holding pretty steady these are the first color transmissions from the moon the picture is not as distinctive is a great feeling for what it's like up there what it looks like these pictures 238 thousand years ago oh yeah we did uh doing fine up there taking photographs and he just passed by you about 10 minutes ago here we go camera fixed okay uh negative uh on the highcon and he was able to spot the lamb last passover ah beautiful beautiful okay

[04:10:05 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15005s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15005s)

[Music] they are completing their own walk and their concern is how still lucid is doing up above them that's why the exception to people were talking about albion the cold fish type of guy he knows where his boys are did the src get up to the platform he's worried about that camera that uh whether or not they got it fixed for the high resolution pictures that they wanted for the uh take out the landing software apollo 16 container very comfortably roger that's a kind of a strange figure of speech for them tonight that's their night and uh in the sense that it's a period they're going to be sleeping for the next nine hours it doesn't have anything to do with the lunar day or night or the earth day or night family at least throughout their night in the united states because a day on the moon is uh 15 days earth days the sun actually during the 20 33 hours that they're on the moon is just 15 degrees over one earth preparing to go up there ready for those moon hours already aren't you outside

[04:12:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15120s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15120s)

now yours okay i've got it okay now you can see over there in the side our shepard's starting up the ladder takes a little leap to get up the first step first step's a long one it's meant to be that way so that the ladder isn't crushed if i'm landing but it's a little hard so how separate about to crawl in the top of the ladder waiting for the lac to come out okay the lac is the equipment belt once they started walking back from uh the far point where they set up the seismic experiments in the central station for the scientific experiments if they've gotten right on the timeline and they're supposed to button up this hatch at 2 27 uh eastern standard time that's just three minutes from now they're just about right

[04:14:17 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15257s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15257s)

[Music] lander antares cbs news color coverage of today's walk on the moon will continue in a moment tang brings you the morning as few men have seen it the sight of our own planet coming up over a strange horizon in space earth rise now two more men will see it and with them tang vitamin seed and orange juice nutritious tang for space men and earth families alan shepard and uh head mitchell are back in antares after their four and a half hour walk on the moon they are closing out uh he's going through the hatch closing out the uh lunar module now shepard is just uh going through the hatch and we'll close it after that he's been up on the porch so called of the lunar module uh what it is a little step large step on which they can work uh before climbing down the ladder or after climbing up to get all their gear back and store it you can hear them as they begin this closeout procedure

[04:16:01 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15361s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15361s)

closeout procedure okay okay come by one minute uh the portable life support system plus it's gone crew members in cabin now remarks like that when he flies on an instrument approach and he's very busy doing something he'll do that thing might not be impossible there might just be a chance to do that tomorrow there tomorrow a little early area of the two small craters that they didn't get to today lyle's now added his first words on the moon to those of neil armstrong pete conrad he said it's been a long way but we're here rather personal referenced i suppose to his six years of being grounded with an ear disorder before he finally got back on flight status and got to make this flight neil armstrong you remember said that's one small step for a man one giant leap for mankind pete conrad said man that may have been a small one for neil but it's a long one for me

[04:18:02 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15482s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15482s)

hatch closed and locked you just heard them say now they begin to repressurize the cabin and they've got a long stay aboard now until tomorrow morning when they make their second walk of the moon if all continues to go well if there were any difficulties now in the spaceship and its oxygen supply or battery power any of its consumables they could blast off from the moon they will have had at least one walk and a re-rendezvous with the command ship flying overhead with stu rosa that russa that doesn't expected expected that they'll get a second good walk in tomorrow morning when they walk further from the lunar module then man has ventured from his spaceship before almost uh a mile away to go up the side of cone crater this has been a day of solid achievement in man's exploration of moon but the accomplishments were not made without some difficulty certainly even before the moon lander began its descent the lander was imperiled by a computer problem uh the two lunar module crewman were not in any danger but the mission certainly was the trouble involved in alarm signal which indicated the computer would abort the mission send it right back away from the moon's surface if the descent was tried well engineers got to work on the ground at mit and at kate kennedy and in houston and by golly they worked out a solution but with just four minutes to spare before they would have had to make the critical decision to send the lunar module around and at least another lunar orbit before they could have tried the landing then came a brief radar failure which cleared up just 90 seconds before the agonizing decision would have been required to either abort the mission or send the lunar module back up to rendezvous with the command module

[04:20:00 (https://www.youtube.com/watch?v=8YveLxEImpA&t=15600s)](https://www.youtube.com/watch?v=8YveLxEImpA&t=15600s)

the command module or to go in for a landing to try at them even on the moon there was some problem with alan shepard's communication gear and that delayed al and ed mitchell's moonwalk for almost an hour the walk itself had some troubles as you've heard concerned with the firing of the small charges against the lunar surface as a test of its seismic properties the time lost prevented the two astronauts from collecting all of the rock and soil that they had hoped to collect maybe they'll be able to make up some of that tomorrow although that's certainly indefinite other activities including planting an experiment package on the lunar surface were accomplished on target and there will be time for collecting more rocks and soil during tomorrow's second even more ambitious space walk for shepard and mitchell safely back aboard their lamb it's been a very hard day's work they've been up for 20 hours now included cutting off from the command module making the landing which was a right on the bullseye earlier this morning and then these long walks we'll be standing by of course while the astronauts catch up on their sleep tonight on the moon and then we'll be back on the air tomorrow morning at 5 30 eastern time with live continuous color coverage of the second moon walk this is walter guide for wally sherrod cbs news space center in new york [Music] this has been a cbs news special report 10 years later the flight of apollo 14 sponsored by tang the nutritious breakfast drink for breakfast tomorrow and western electric the people who make communications equipment for the bell system next apollo update on the cbs evening news with walter cronkite this is cbs

---

END